

1-13. (CANCELED)

14. (NEW) A method of forming a cannula comprising the steps of:

assembling a cannula mandrel assembly comprising separable engageable parts including a facepiece mandrel, at least one nasal prong mandrel, and a mouthpiece mandrel;

heating the cannula mandrel assembly to a desired temperature;

providing an uncured cannula forming polymeric material in flowable state;

applying at least one coating of the polymeric material to the cannula mandrel assembly to provide a desired material thickness coating on the cannula mandrel assembly and forming the cannula;

at least partially curing the coating of the polymeric material on the cannula mandrel assembly; and

disassembling the cannula mandrel assembly by withdrawing the at least one prong mandrel, the mouthpiece mandrel and the facepiece mandrel from the formed cannula.

15. (NEW) The method according to claim 14, further comprising the step of supporting the at least one nasal prong mandrel by a prong attachment portion of the facepiece mandrel, and supporting the mouthpiece mandrel by a mouthpiece attachment portion of the facepiece mandrel.

16. (NEW) The method according to claim 15, further comprising the step of forming the prong attachment portion in the facepiece mandrel as one of a hole and a recess sized for slidably mating with an attachment end of the prong mandrel.

17. (NEW) The method according to claim 15, further comprising the step of slidably engaging an attachment end of the mouthpiece mandrel with the facepiece mandrel.

18. (NEW) The method according to claim 17, further comprising the step of assembling the mouthpiece mandrel with the facepiece mandrel such that the mouthpiece mandrel extends radially from and substantially perpendicular to the facepiece mandrel.

19. (NEW) The method according to claim 17, further comprising the step of assembling the mouthpiece mandrel with the facepiece mandrel such that the mouthpiece mandrel extends radially from and substantially perpendicular to the

facepiece mandrel with a planar surface of the facepiece mandrel abutting against a mating planar surface of the mouthpiece mandrel.

20. (NEW) The method according to claim 18, further comprising the step of manufacturing the cannula mandrel assembly from beryllium copper.

21. (NEW) The method according to claim 14, further comprising the step of manufacturing the cannula mandrel assembly from beryllium copper.

22. (NEW) The method according to claim 14, further comprising the step of applying the polymeric material to the cannula mandrel assembly by a dipping process.

23. (NEW) The method according to claim 14, further comprising the step of heating the cannula mandrel assembly at a temperature of from about 350°F to about 550°F prior applying the polymeric material to the cannula mandrel assembly.

24. (NEW) The method according to claim 14, further comprising the step coating the cannula mandrel assembly with a layer of release material prior to applying at least one coating of the polymeric material thereto.

25. (NEW) The method according to claim 14, further comprising the step of applying a plurality of coatings of the polymeric material to the cannula mandrel assembly by a plurality of dipping steps.

26. (NEW) The method according to claim 14, further comprising the step of partially curing the polymeric material by heating the polymeric material at a temperature of from about 410°F to about 450°F.

27. (NEW) A method of forming a cannula having at least a mouthpiece lumen for one of sampling an expired gas and supplying a desired gas, the method comprising the steps of:

a) assembling a cannula mandrel assembly, from a plurality of separate parts comprising first and second prong forming mandrels, a facepiece forming mandrel and at least one mouthpiece forming mandrel, by removably coupling a respective end connection of each of the first and the second prong forming mandrels to the facepiece forming mandrel, and removably coupling an end connection of the mouthpiece forming mandrel to the facepiece forming mandrel;

b) heating the cannula mandrel assembly to a desired temperature;

c) applying a desired thickness of a plastisol of a polymeric material to the heated cannula mandrel assembly;

d) at least partially curing the applied polymeric material; and

e) extracting the first and second prong forming mandrels, the mouthpiece forming mandrel, and the facepiece forming mandrel from the at least partially cured polymeric material to form the cannula having at least a mouthpiece lumen for one of sampling an expired gas and supplying a desired gas.

28. (NEW) The method according to claim 27, further comprising the step of removably coupling the end connection of the mouthpiece forming mandrel to a central region on one side of the facepiece forming mandrel, removably coupling the end connection of the first prong forming mandrel to an opposite side of the facepiece forming mandrel spaced apart from the mouthpiece forming mandrel, and removably coupling the end connection of the second prong forming mandrel to the opposite side of the facepiece forming mandrel spaced apart from the mouthpiece forming mandrel such that the mouthpiece forming mandrel is located between the first and second prong forming mandrels.

29. (NEW) The method according to claim 27, further comprising the step of partially curing the polymeric material using heat from the heated cannula mandrel assembly and further curing of the polymeric material in an oven.

30. (NEW) The method according to claim 27, further comprising the step of applying the polymeric material by a dipping process.

31. (NEW) The method according to claim 27, further comprising the step of forming one of a hole and a recess in the facepiece forming mandrel to facilitate removably coupling the respective end connection of each of the first and the second prong forming mandrels to the facepiece forming mandrel.

32. (NEW) The method according to claim 31, further comprising the step of removably coupling the mouthpiece mandrel with the facepiece mandrel such that the mouthpiece mandrel extends radially from and substantially perpendicular to the facepiece mandrel with a planar surface of the facepiece mandrel abutting against a mating planar surface of the mouthpiece mandrel.

33. (NEW) A method of forming a cannula with a pair of nasal prongs and a mouthpiece lumen all communicating with a facepiece of the cannula, the method comprising the steps of:

constructing a cannula mandrel assembly by attaching a pair of nasal prong forming mandrels and a mouthpiece forming mandrel to a facepiece forming mandrel to define an interior space of the cannula;

heating the cannula mandrel assembly to a desired temperature;  
providing a cannula forming polymeric material as a plastisol;  
applying a desired thickness of the plastisol to the heated cannula mandrel assembly;

curing the plastisol by application of heat; and

disengaging the pair of nasal prong forming mandrels and the mouthpiece forming mandrel from the facepiece forming mandrel and extracting the facepiece forming mandrel from the cured plastisol to form the cannula having a pair of nasal prongs and a mouthpiece lumen communicating with a facepiece of the formed cannula for one of sampling an expired gas and supplying a desired gas.

34. (NEW) A nasal and oral cannula having a pair of nasal prongs and a mouthpiece lumen with a contiguous flow path between the pair of nasal prongs and the mouthpiece lumen, the nasal and oral cannula formed by the method comprising the steps of:

assembling a cannula mandrel assembly comprising separable engageable parts including a facepiece mandrel, at least one nasal prong mandrel, and a mouthpiece mandrel;

heating the cannula mandrel assembly to a desired temperature;

providing an uncured cannula forming polymeric material in flowable state;

applying at least one coating of the polymeric material to the cannula mandrel assembly to provide a desired material thickness coating on the cannula mandrel assembly and forming the cannula;

at least partially curing the coating of the polymeric material on the cannula mandrel assembly; and

disassembling the cannula mandrel assembly by withdrawing the at least one prong mandrel, the mouthpiece mandrel and the facepiece mandrel from the formed cannula.